

(No Model:)

J. J. SCHILLINGER.  
Refrigerator Building.

No. 233,030.

Patented Oct. 5, 1880.

Fig. 2.

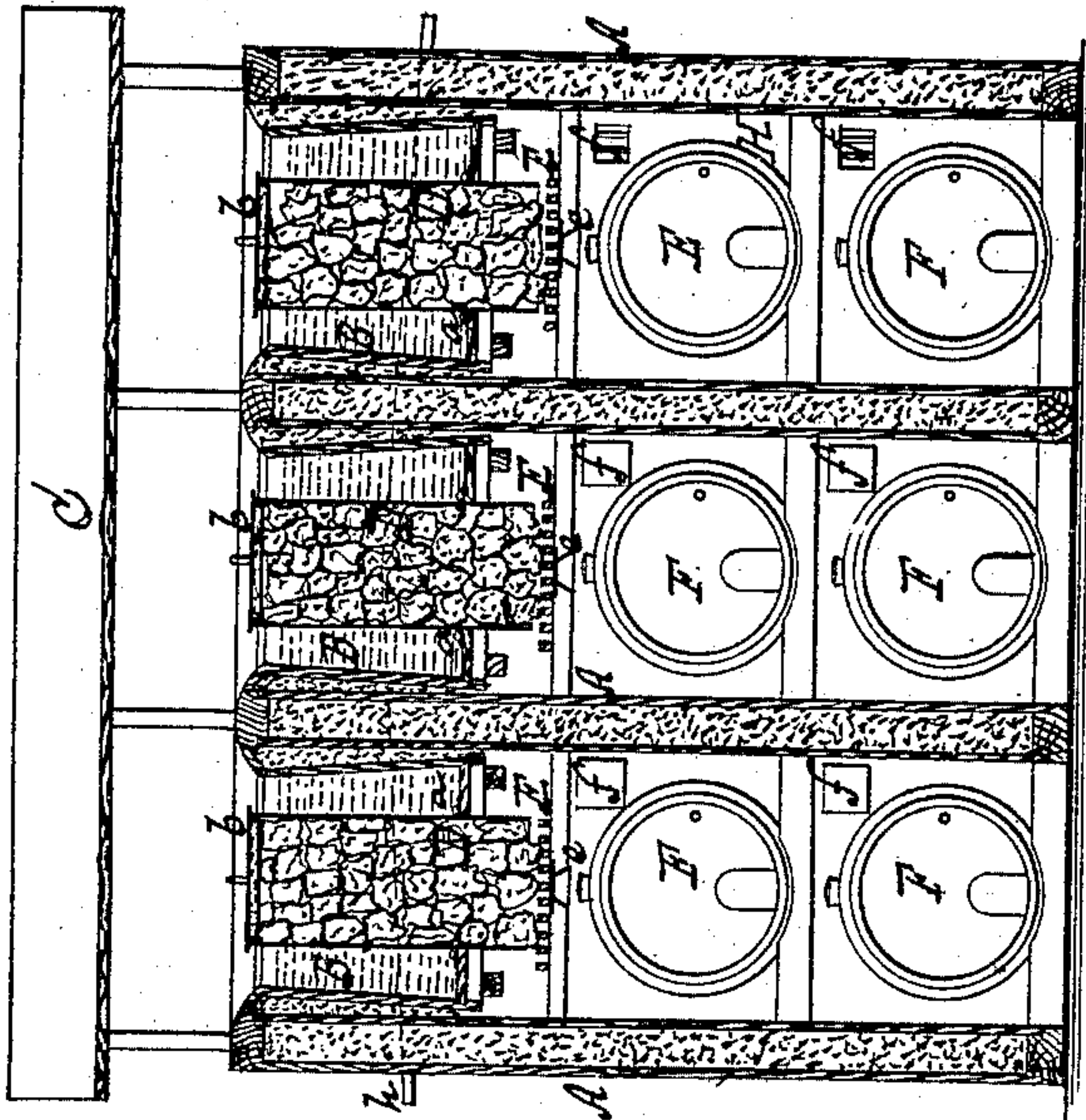
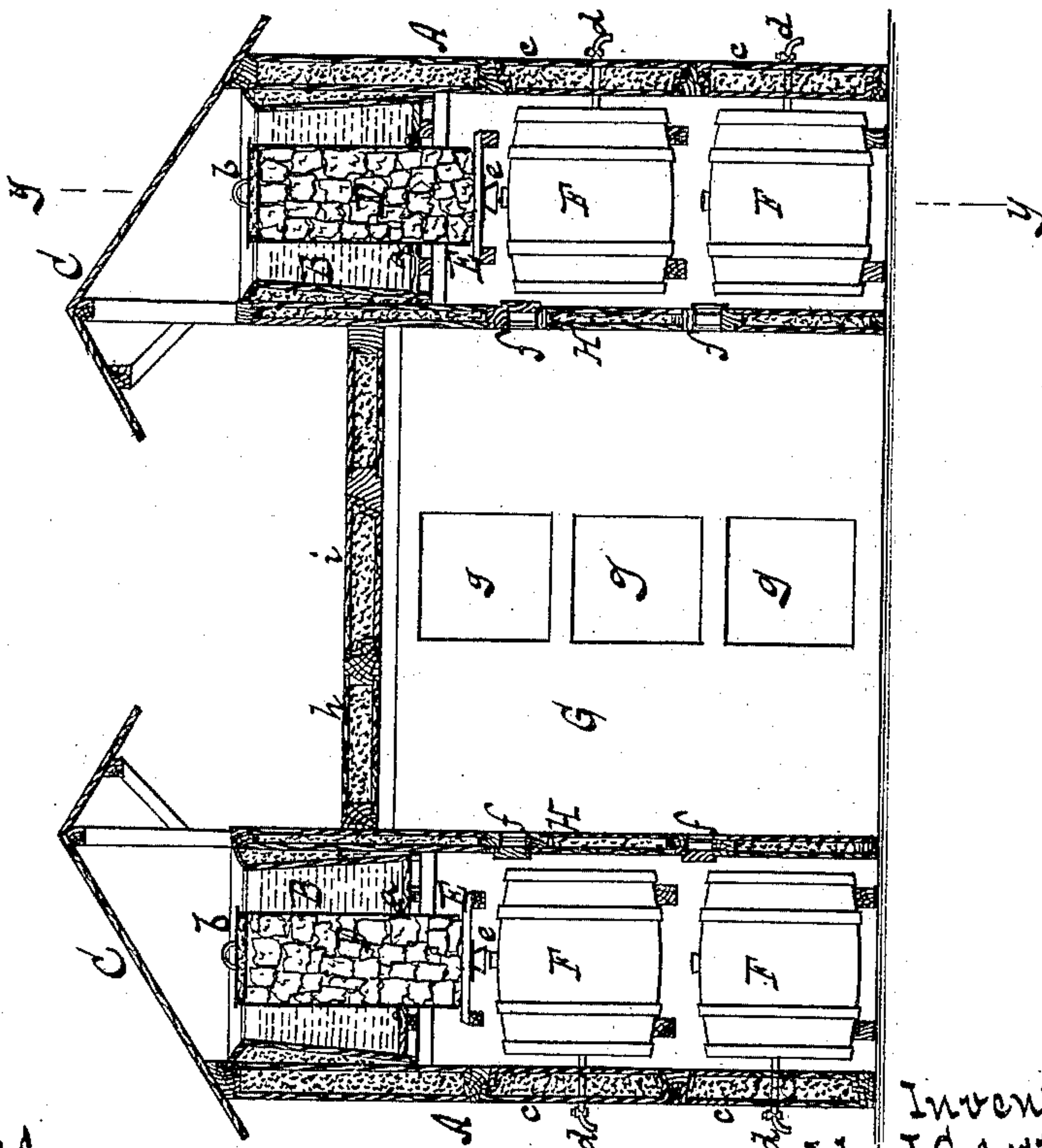


Fig. 1.



Witnesses  
Otto Schufeldt  
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# UNITED STATES PATENT OFFICE.

JOHN J. SCHILLINGER, OF NEW YORK, N. Y.

## REFRIGERATOR-BUILDING.

SPECIFICATION forming part of Letters Patent No. 233,030, dated October 5, 1880.

Application filed March 26, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN J. SCHILLINGER, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Fermenting and Storage House for Beer and other Liquids, of which the following is a specification.

This invention consists in the combination, in a building for fermenting and storing beer and other liquids, of a fermenting-tun built upon the open-top floor of the building, an ice-receiver fastened to the bottom of the fermenting-tun and extending up to a level, or nearly so, with the top edge of the fermenting-tun and down beneath its bottom into the story below, an open platform or grate to support the ice in the ice-receiver, and a storing-room for receiving one or more casks below such open platform or grate, so that the foul gases which rise from the liquid during the process of fermentation escape freely without having a chance to enter the storing-room or to affect the fermenting liquid, and that the ice contained in one and the same ice-receiver serves to cool the liquid in the fermenting-tun and the air in the storing-room.

This invention is illustrated in the accompanying drawings, in which Figure 1 represents a transverse vertical section of my fermenting and storage house in the plane  $xx$ , Fig. 2. Fig. 2 is a longitudinal vertical section in the plane  $yy$ , Fig. 1.

Similar letters indicate corresponding parts.

In the drawings, the letter A designates my fermenting and storage house, the top story of which is occupied by a fermenting-tun, B, which, in the example shown in the drawings, forms an integral part of the building, its sides being protected against the influence of the external atmosphere by a layer of coal-dust or other bad conductor of heat interposed between the double walls of the building. The space above the fermenting-tun B is covered by a roof, C, but it is open on three sides, so that the foul gases which rise during the fermenting process of beer or other liquids can freely escape.

In the interior of the fermenting-tun is placed an ice-receiver, D, which is made of sheet metal in the form of a cylinder, and provided

with a flange,  $a$ , by means of which it rests upon the bottom of the fermenting-tun. It extends down beneath said bottom close to a grate or open platform, E, so that the ice placed into said receiver rests upon this grate. The top of the ice-receiver is on a level, or nearly so, with the top of the fermenting-tun, and it is provided with a cover,  $b$ , which is made of or protected on its inner surface by a layer of wood or other bad conductor of heat, and which closes down tight, but can readily be removed for the purpose of filling the receiver with ice.

The space beneath the grate E forms a storage-room large enough to receive one or more casks, F, which are introduced through doors  $c$  in the side of the building, and which are provided with faucets  $d$ , extending out through the side of the building, so that samples of the liquid in the casks can be drawn and tested without opening the doors  $c$ . A suitable shield or screen,  $e$ , which is attached to the grate E, prevents the drip-water from striking the bung of the upper cask, but the drip-water is free to flow down over the sides of the cask or casks.

By this arrangement the ice in the receiver D serves to cool the liquid in the fermenting-tun and the air in the storage-room, and the foul gases which escape from the fermenting-tun have no chance to pass into the storage-room, so that the air in this room remains pure and its temperature can be readily maintained at the desired point. On one side the fermenting and storage house A joins an ice-house, G, both being separated from each other by a common partition-wall, H, and in this wall are apertures  $f$ , leading from the exterior of the ice-house into the storage-room of the house A. These apertures can be opened or closed at will by suitable shutters, and if one or more of them are open the cold air from the ice-house has access to the storage-room.

The ice-house is provided with doors  $g$ , through which the ice is introduced, and the roof  $h$  of the ice-house is provided with a hatchway,  $i$ , which also gives access to the interior of the ice-house. Said roof is situated at such a level that a person standing thereon can conveniently inspect the fermenting-tun B, and that from said roof the ice-receiver D can be easily reached whenever it is desirable to do so.

In practice I build two or more fermenting and storage houses on each side of the ice-house G, as shown in the drawings.

By this arrangement a brewer is enabled to  
5 put up a fermenting and storage house, together with the ice-house, at a comparatively small expense, and if the business increases he can readily add more fermenting and storage houses in a short time and with little expense.

10 It is obvious that in the ice-receiver D any other suitable cooling medium may be substituted for ice, such as one of the well-known freezing-mixtures or one of the means commonly employed in ice-machines.

15 What I claim as new, and desire to secure by Letters Patent, is—

The combination, in a building for fermenting and storing beer and other liquids, of a fer-

menting-tun built up on the open-top floor of the building, an ice-receiver supported by the 20 bottom of the fermenting-tun and extending up to a level, or nearly so, with the top edge thereof and down beneath its bottom into the story below, an open platform or grate to support the ice in the ice-receiver, and a storing- 25 room for receiving one or more casks below such open platform or grate, substantially as and for the purpose described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing 30 witnesses.

JOHN J. SCHILLINGER.

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.